Allied Telesyn International

CentreCOM ®

AT-810SL

Multiport Transceiver Fanout
Version 2

User Manual

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Electrical Installation and Safety Requirements

U.S. Federal Communications Commission

RADIATED ENERGY

Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Note: Modifications or changes not expressly approved by the manufacturer or the FCC, can void your right to operate this equipment.

Canadian Department of Communications

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

STANDARDS: This product meets the following standards

RFI Emission EN55022 Class B

WARNING: This product requires shielded cables to comply with Class B emission limits. If not used with shielded cables, this product may cause radio interference in which case the user may be required to take adequate measures.

Immunity EN50082-1

SAFETY

Electrical Safety EN60950, UL1950, CSA 950

ELECTRICAL NOTICES
WARNING: ELECTRIC SHOCK HAZARD
To prevent ELECTRIC shock, do not remove cover. No user-serviceable parts inside. This unit contains HAZARDOUS VOLTAGES and should only be opened by a trained and qualified technician. To avoid the possibility of ELECTRIC SHOCK, disconnect electric power to the product before connecting or disconnecting the LAN cables.

LIGHTNING DANGER
DANGER: DO NOT WORK on equipment or CABLES during periods of LIGHTNING ACTIVITY.

CAUTION: POWER CORD IS USED AS A DISCONNECTION DEVICE.
TO DE-ENERGISE EQUIPMENT, disconnect the power cord.

INSTALLATION
ELECTRICAL—AUTO VOLTAGE ADJUSTMENT
This product will automatically adjust to any voltage between the ranges shown on the label.

ELECTRICAL—TYPE CLASS 1 EQUIPMENT
THIS EQUIPMENT MUST BE EARTHED. Power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.

ELECTRICAL—CORD NOTICE
Use power cord, maximum 4.5 meters long, rated 6 amp minimum, 250V, made of HAR cordage molded IEC 320 connector on one end and on the other end a plug approved by the country of end use.

MOUNTING INSTRUCTIONS
CAUTION: These models are designed for operation in the HORIZONTAL position. VERTICAL MOUNTING must not be done without the use of an Allied Telesyn vertical mount chassis designed for this purpose.

CAUTION: Air vents must not be blocked and must have free access to the room ambient air for cooling.

CAUTION: DO NOT detach rubber feet from the product unless an Allied Telesyn vertical mounting chassis is being used.

OPERATING TEMPERATURE
This product is designed for a maximum ambient temperature of 50 degrees Celsius.

ALL COUNTRIES: Install product in accordance with local and National Electrical Codes.

NORMEN: Dieses Produkt erfüllt die Anforderungen der nachfolgenden Normen.

Hochfrequenzstörung EN55022 Klasse B

WARNUNG: Dieses Produkt muß mit entstörten Kabeln versehen sein, damit es den Emissionsgrenzen der Klasse B entspricht. Wenn dieses Produkt nicht mit entstörten Kabeln verwendet wird, könnte es Funkstörungen hervorrufen; der Anwender müßte in diesem Fall angemessene Gegenmaßnahmen ergreifen.

Störsicherheit EN50082-1

SICHERHEIT

Elektrische Sicherheit EN60950, UL1950, CSA 950

ACHTUNG: GEFÄHRLICHE SPANNUNG
Das Gehäuse nicht öffnen. Das Gerät enthält keine vom Benutzer wartbaren Teile. Das Gerät steht unter Hochspannung und darf nur von qualifiziertem technischem Personal geöffnet werden. Vor Anschluß der LAN-Kabel, Gerät vom Netz trennen.

GEFAHR DURCH BLITZSCHLAG
GEFAHR: Keine Arbeiten am Gerät oder an den Kabeln während eines Gewitters ausführen

VORSICHT: DAS NETZKABEL DIENT ZUM TRENNEN DER STROMVERSORGUNG. ZUR TRENNUNG VOM NETZ, KABEL AUS DER VORSICHT STECKDOSE ZIEHEN.

INSTALLATION
AUTOMATISCHE SPANNUNGSEINSTELLUNG
Dieses Gerät stellt sich automatisch auf die auf dem Etikett aufgeführten Spannungswerte ein.

KLASSE 1 GERÄTE
DIESE GERÄTE MÜSSEN GEERDET SEIN. Der Netzstecker darf nur mit einer vorschriftsmäßig geerdeten Steckdose verbunden werden. Ein unvorschriftsmäßiger Anschluß kann das Metallgehäuse Teile unter gefährliche elektrische Spannungen setzen.

NETZKABEL
Das Netzkabel sollte eine maximale Länge von 4,5 Metern, einen Nennwert von mindestens 6 A und 250 V haben, aus HAR-Material hergestellt und mit einer gepreßten, IEC 320 entsprechenden, Anschlußverbindung an einem Ende, und am anderen Ende mit einem im Land des Endverbrauchers geprüften Stecker ausgestattet sein.

MONTAGEANWEISUNGEN
VORSICHT: Diese Modelle sind für Betrieb in horizontaler Position entworfen worden. Das Gerät darf NICHT OHNE Gebrauch eines dafür entworfenen Allied Telesyn-Vertikalmontagegestells in VERTIKALER Position montiert werden.

VORSICHT: Die Entlüftungsöffnungen dürfen nicht versperrt sein und müssen zum Kühlen freien Zugang zur Raumluft haben.

VORSICHT: Die Gummifüße NICHT ENTFERNEN, außer bei Gebrauch des Allied Telesyn-Vertikalmontagegestells.

MONTAGEANWEISUNGEN
VORSICHT: Diese Modelle sind für Betrieb in horizontaler Position entworfen worden. Das Gerät darf NICHT OHNE Gebrauch eines dafür entworfenen Allied Telesyn-Vertikalmontagegestells in VERTIKALER

BETRIEBSTEMPERATUR
Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 50˚ C entworfen.

ALLE LÄNDER: Installation muß örtlichen und nationalen elektrischen Vorschriften entsprechen.

Standarder: Dette produkt tilfredsstiller de følgende standarder.

Radiofrekvens forstyrrelsesemission EN55022 Klasse B

ADVARSEL: Der skal bruges skærmkabler med dette produkt for at opfylde Klasse B emissionsgrænser. Hvis skærmkabler ikke bruges, kan dette produkt muligvis forårsage radio forstyrrelse. Bliver dette tilfældet, påkræves brugeren muligvis at tage tilstrækkelige foranstaltninger.

Immunitet EN50082-1

SIKKERHED

Elektrisk sikkerhed. EN60950, UL1950, CSA 950.

ELEKTRISKE FORHOLDSREGLER
ADVARSEL: RISIKO FOR ELEKTRISK STØD
For at forebygge ELEKTRISK stød, undlad at åbne apparatet. Der er ingen indre dele, der kan repareres af brugeren. Denne enhed indeholder LIVSFARLIGE STRØMSPÆNDINGER og bør kun åbnes af en uddannet og kvalificeret tekniker. For at undgå risiko for ELEKTRISK STØD, afbrydes den elektriske strøm til produktet, før LAN-kablerne monteres eller afmonteres.

FARE UNDER UVEJR
FARE: UNDLAD at arbejde på udstyr eller KABLER i perioder med LYNAKTIVITET.

ADVARSEL: DEN STRØMFØRENDE LEDNING BRUGES TIL AT AFBRYDE STRØMMEN. SKAL STRØMMEN TIL APPARATET AFBRYDES, tages ledningen ud af stikket.

INSTALLATION
ELEKTRISK—AUTOMATISK SPÆNDINGSREGULERING
Dette apparat vil automatisk tilpasse sig enhver spænding indenfor de værdier, der er angivet på etiketten.

ELEKTRISK—KLASSE 1-UDSTYR
DETTE UDSTYR KRÆVER JORDFORBINDELSE. Stikket skal være forbundet med en korrekt installeret jordforbunden stikkontakt. En ukorrekt installeret stikkontakt kan sætte livsfarlig spænding til tilgængelige metaldele.

ELEKTRISK—LEDNING
Anvend ledning af maksimum 4,5 meters længde, med en kapacitet på minimum 6 amp., 250 v, bestående af en IEC 320 connector med indstøbt HAR ledning i den ene ende og et stik i den anden ende godkendt der er af myndighederne i brugerlandet.

INSTRUKTIONER FOR OPSTILLING
ADVARSEL: Disse modeller er konstrueret til at betjenes i HORISONTAL position (vandret). VERTIKAL OPSTILLING (lodret) må IKKE FORETAGES uden brug af et Allied Telesyn vertikalt monteringsstel konstrueret til dette formål.

ADVARSEL: Ventilationsåbninger må ikke blokeres og skal have fri adgang til den omgivende luft i rummet for afkøling.

ADVARSEL: UNDLAD at fjerne gummisoklerne fra apparatet, med mindre der anvendes et Allied Telesyn vertikalt monteringsstel.

BETJENINGSTEMPERATUR
Dette apparat er konstrueret til en omgivende temperatur på maksimum 50 grader C.

ALLE LANDE: Installation af produktet skal ske i overensstemmelse med lokal og national lovgivning for elektriske installationer.

Eisen: Dit product voldoet aan de volgende eisen.

RFI Emissie EN55022 Klasse B

WAARSCHUWING: Dit product vereist beschermende kabels in overeenstemming met de limieten van Klasse B emissie. Als het niet met beschermende kabels wordt gebruikt, kan dit produkt radiostoring veroorzaken, in welk geval de gebruiker verplicht kan worden om gepaste maatregelen te nemen.

Immuniteit EN50082-1

VEILIGHEID

Electrische Veiligheid EN60950, UL1950, CSA 950

WAARSCHUWINGEN MET BETREKKING TOT ELEKTRICITEIT
WAARSCHUWING: GEVAAR VOOR ELEKTRISCHE SCHOKKEN
Gelieve het deksel niet te verwijderen, teneinde ELEKTRISCHE schokken te voorkomen. Binnenin bevinden zich geen onderdelen die door de gebruiker kunnen worden onderhouden. Dit toestel staat onder GEVAARLIJKE SPANNING en mag alleen worden geopend door een daartoe opgeleide en bevoegde technicus. Om het gevaar op ELEKTRISCHE SCHOKKEN te vermijden, moet u het toestel van de stroombron ontkoppelen alvorens de LAN-kabels te koppelen of ontkoppelen.

GEVAAR VOOR BLIKSEMINSLAG
GEVAAR: NIET aan toestellen of KABELS WERKEN bij BLIKSEM.

WAARSCHUWING: HET TOESTEL WORDT UITGESCHAKELD DOOR DE STROOMKABEL TE ONTKOPPELEN. OM HET TOESTEL STROOMLOOS TE MAKEN: de stroomkabel ontkoppelen.

INSTALLATIE
ELEKTRISCH—AUTOMATISCHE AANPASSING VAN DE SPANNING
Dit toestel past zich automatisch aan elke spanning aan, tussen de waarden op het label vermeld.

ELEKTRISCHE—TOESTELLEN VAN KLASSE 1
DIT TOESTEL MOET GEAARD WORDEN. De stekker moet aangesloten zijn op een juist geaarde contactdoos. Een onjuist geaarde contactdoos kan de metalen onderdelen waarmee de gebruiker eventueel in aanraking komt onder gevaarlijke spanning stellen.

ELEKTRISCHE—SNOEREN
Gebruik een elektrisch snoer, maximum 4,5 meter lang, berekend voor ten minste 6 ampère, 250 V, uit HAR vervaardigd, met aan het ene uiteinde een gevormde IEC 320 stekker en aan het andere uiteinde een stekker die goedgekeurd is door het land waar het toestel zal worden gebruikt.

MONTAGE-INSTRUCTIES
WAARSCHUWING: Deze modellen zijn ontworpen om te werken in HORIZONTALE stand. VERTICALE MONTAGE mag NIET UITGEVOERD WORDEN, tenzij een daartoe speciaal ontworpen Allied Telesyn chassis voor verticale montage wordt gebruikt.

WAARSCHUWING: De ventilatiegaten mogen niet worden gesperd en moeten de omgevingslucht ongehinderd toelaten voor afkoeling.

WAARSCHUWING: De rubberen voetjes NIET van het produkt LOSMAKEN behalve wanneer een chassis voor vertikale montage van Allied Telesyn wordt gebruikt.

BEDRIJFSTEMPERATUUR
De omgevingstemperatuur voor dit produkt mag niet meer bedragen dan 50 graden Celsius.

ALLE LANDEN: het toestel installeren overeenkomstig de lokale en nationale elektrische voorschriften.

NORMES: ce produit est conforme aux normes de suivantes :

Emission d'interférences radioélectriques EN55022 Classe B

MISE EN GARDE: conformément aux limites d'émission de la Classe B, ce produit doit être utilisé avec des câbles blindés. Si ce produit n'est pas utilisé avec des câbles blindés, il peut émettre des interférences radioélectriques. Auquel cas, l'utilisateur devra prendre les mesures adéquates.

Immunité EN50082 - 1

SECURITE

Sécurité électrique EN60950, UL1950, CSA 950

INFORMATION SUR L'ELECTRICITE
AVERTISSEMENT: DANGER D'ELECTROCUTION
Pour empêcher les dangers d'ELECTROCUTION, ne pas enlever le couvercle. L'équipement ne contient aucun élément réparable par l'utilisateur. Cet appareil comprend des TENSIONS DANGEREUSES et ne doit être ouvert que par un technicien dûment qualifié. Pour éviter tout risque d'ELECTROCUTION, débrancher l'appareil de la prise de courant avant de connecter ou de déconnecter les câbles LAN.

DANGER DE FOUDRE
DANGER: NE PAS MANIER l'équipement ou les CABLES pendant les périodes d'activité orageuse.

ATTENTION: LE CORDON D'ALIMENTATION SERT DE MISE HORS CIRCUIT
POUR COUPER L'ALIMENTATION DE L'APPAREIL, débranchez le cordon.

INSTALLATION
ELECTRICITE—REGLAGE DE TENSION AUTOMATIQUE
Ce produit peut s'ajuster automatiquement sur n'importe quelle tension comprise dans la plage indiquée sur le label.

ELECTRICITE—EQUIPEMENT DE CLASSE 1
CET APPAREIL DOIT ETRE MIS A LA TERRE. La prise de courant doit être branchée dans une prise femelle correctement mise à la terre. Sinon, des tensions dangereuses risqueraient d'atteindre les pièces métalliques accessibles à l'utilisateur.

ELECTRICITE—INFORMATION SUR LE CORDON
Utiliser un cordon secteur de 4,5 mètres de long maximum, calibré à 6 ampères minimum, 250V, et fabriqué en câblage HAR avec connecteur IEC 32C moulé à une extrémité et à l'autre extrémité, une prise de courant mâle répondant aux normes du pays d'utilisation.

INSTRUCTIONS DE MONTAGE
ATTENTION: Ces modèles sont destiné à fonctionner en position horizontale. L'appareil NE DOIT PAS être utilisé en MONTAGE VERTICAL sans employer un châssis de montage vertical Allied Telesyn conçu à cet effet.

ATTENTION: Ne pas bloquer les fentes d'aération, ce qui empêcherait l'air ambiant de circuler librement pour le refroidissement.

ATTENTION: NE PAS ôter les pattes d'attache en caoutchouc du produit, à moins d'utiliser un châssis de montage vertical Allied Telesyn.

TEMPERATURE DE FONCTIONNEMENT
Ce produit est capable de tolérer une température ambiante maximum de 50 degrés Celsius

POUR TOUS PAYS: Installer le produit conformément aux normes électriques nationales et locales.

Standardit: Tämä tuote on seuraavien standardien mukainen.

Radioaaltojen häirintä EN55022 Luokka B

VAROITUS: Tämä tuote vaatii suojatut kaabelit täyttääkseen B Luokan säteilyrajoitukset. Ellei suojattuja kaapeleita käytetä, tämä laite voi aiheuttaa radioaaltohäiriöitä, missä tapauksessa laitteen käyttäjän on mahdollisesti ryhdyttävä tarpeellisiin toimenpiteisiin.

Kestävyys EN50082-1

TURVALLISUUS

Sähköturvallisuus EN60950, UL1950, CSA 950

SÄHKÖÖN LIITTYVIÄ HUOMAUTUKSIA
VAROITUS: SÄHKÖISKUVAARA
Estääksesi SÄHKÖISKUN älä poista kantta. Sisällä ei ole käyttäjän huollettavissa olevia osia. Tämä laite sisältää VAARALLISIA JÄNNITTEITÄ ja sen voi avata vain koulutettu ja pätevä teknikko. Välttääksesi SÄHKÖISKUN mahdollisuuden katkaise sähkövirta tuotteeseen ennen kuin liität tai irrotat paikallisverkon (LAN) kaapelit.

SALAMANISKUVAARA
HENGENVAARA: ÄLÄ TYÖSKENTELE laitteiden tai KAAPELEIDEN KANSSA SALAMOINNIN AIKANA.

HUOMAUTUS: VIRTAJOHTOA KÄYTETÄÄN VIRRANKATKAISULAITTEENA. VIRTA KATKAISTAAN irrottamalla virtajohto.

ASENNUS
SÄHKÖ —AUTOMAATTINEN JÄNNITTEENSÄÄTÖ
Tämä tuote säätää automaattisesti mihin tahansa jännitteeseen ohjetarrassa annettujen arvojen välillä.

SÄHKÖ —TYYPPILUOKAN 1 LAITTEET
TÄMÄ LAITE TÄYTYY MAADOITTAA. Pistoke täytyy liittää kunnollisesti maadoitettuun pistorasiaan. Virheellisesti johdotettu pistorasia voi altistaa metalliosat vaarallisille jännitteille.

SÄHKÖ —JOHTOON LIITTYVÄ HUOMAUTUS
Käytä seuraavanlaista virtajohtoa: maksimipituus 4,5 metriä, minimiteho 6 ampeeria, 250 V, valmistettu HAR-johdostosta, muovattu IEC 320 -liitin toisessa päässä ja käyttömaassa hyväksytty pistoke toisessa päässä.

ASENNUSSOHJEET
HUOMAUTUS: Nämä mallit on suunniteltu käytettäviksi VAAKA-asennossa. PYSTYASENNUSTA EI SAA TEHDÄ ilman Allied Telesyn -pystykiinnitysalustaa, joka on suunniteltu tähän tarkoitukseen.

HUOMAUTUS: Ilmavaihtoreikiä ei pidä tukkia ja niillä täytyy olla vapaa yhteys ympäröivään huoneilmaan, jotta ilmanvaihto tapahtuisi.

HUOMAUTUS: ÄLÄ irroita kumijalkoja tuotteesta, ellei Allied Telesyn-pystykiinnitysalusta ole käytössä.

KÄYTTÖLÄMPÖTILA
Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 50° C.

KAIKKI MAAT: Asenna tuote paikallisten ja kansallisten sähköturvallisuusmääräysten mukaisesti.

Standard: Questo prodotto è conforme ai seguenti standard.

Emissione RFI (interferenza di radiofrequenza) EN55022 Classe B

AVVERTENZA: questo prodotto richiede cavi schermati per adeguarsi ai limiti di emissione per gli apparecchi di Classe B. Se non viene usato con cavi schermati, questo prodotto potrebbe causare radio interferenza, nel qual caso potrebbe richiedersi all'utente di prendere gli adeguati provvedimenti.

Immunità EN50082-1

NORME DI SICUREZZA

Sicurezza elettrica EN60950, UL1950, CSA 950

AVVERTENZE ELETTRICHE
ATTENZIONE: PERICOLO DI SCOSSE ELETTRICHE
Per evitare SCOSSE ELETTRICHE non asportare il coperchio. Le componenti interne non sono riparabili dall'utente. Questa unità ha TENSIONI PERICOLOSE e va aperta solamente da un tecnico specializzato e qualificato. Per evitare ogni possibilità di SCOSSE ELETTRICHE, interrompere l'alimentazione del dispositivo prima di collegare o staccare i cavi LAN.

PERICOLO DI FULMINI
PERICOLO: NON LAVORARE sul dispositivo o sui CAVI durante PRECIPITAZIONI TEMPORALESCHE.

ATTENZIONE: IL CAVO DI ALIMENTAZIONE È USATO COME DISPOSITIVO DI DISATTIVAZIONE. PER TOGLIERE LA CORRENTE AL DISPOSITIVO staccare il cavo di alimentazione.

INSTALLAZIONE
ELETTRICITÀ—REGOLAZIONE AUTOMATICA DELLA TENSIONE
Questo prodotto regolerà automaticamente la tensione ad un valore compreso nella gamma indicata sull'etichetta.

ELETTRICITÀ—DISPOSITIVI DI CLASSE 1
QUESTO DISPOSITIVO DEVE AVERE LA MESSA A TERRA. La spina deve essere inserita in una presa di corrente specificamente dotata di messa a terra. Una presa non cablata in maniera corretta rischia di scaricare una tensione pericolosa su parti metalliche accessibili.

ELETTRICITÀ—AVVERTENZA SUL CAVO
Usare un cavo della lunghezza massima di metri 4,5, con capacità minima di 6 A, 250 V, di filo HAR, dotato di connettore stampato IEC 320 ad un'estremità e di spina approvata dal paese di destinazione all'altra.

ISTRUZIONI PER IL MONTAGGIO
ATTENZIONE: questi modelli sono concepiti per il funzionamento in posizione ORIZZONTALE. NON È POSSIBILE EFFETTUARE IL MONTAGGIO VERTICALE senza utilizzare l'apposito telaio per il montaggio verticale Allied Telesyn.

ATTENZIONE: Le prese d'aria non vanno ostruite e devono consentire il libero ricircolo dell'aria ambiente per il raffreddamento.

ATTENZIONE: NON staccare il piedino in gomma dal prodotto tranne qualora si utilizzi il telaio Allied Telesyn per il montaggio verticale.

TEMPERATURA DI FUNZIONAMENTO
Questo prodotto è concepito per una temperatura ambientale massima di 50 gradi centigradi.

TUTTI I PAESI: installare il prodotto in conformità alle vigenti normative elettriche nazionali.

Sikkerhetsnormer: Dette produktet tilfredsstiller følgende sikkerhetsnormer.

RFI stråling EN55022 Klasse B

ADVARSEL: Det må benyttes isolerte kabler med dette produktet for å tilfredsstille Klasse B strålingsgrenser. Hvis ikke kan dette produktet forårsake radioforstyrrelse. Hvis dette skjer, må brukeren ta de nødvendige forholdsregler.

Immunitet EN50082-1

SIKKERHET

Elektrisk sikkerhet EN60950, UL1950, CSA 950

ELEKTRISKE MEDDELELSE
ADVARSEL: FARE FOR ELEKTRISK SJOKK
For å unngå ELEKTRISK sjokk, må dekslet ikke tas av. Det finnes ingen deler som du kan bruke på innsiden. Denne enheten inneholder FARLIGE SPENNING, og må kun åpnes av en opplært, kvalifisert tekniker. For å unngå muligheten av ELEKTRISK SJOKK, må den elektriske strømmen til produktet være av når du slår LAN-ledninger av og på.

FARE FOR LYNANTENNELSE
FARE: MÅ IKKE BRUKES på utstyr eller ledninger mens LYN-AKTIVITET er i gang.

FORSIKTIG: STRØMLEDNINGEN BRUKES TIL Å SLÅ APPARATET AV.
HVIS DU VIL DEAKTIVISERE UTSTYRET, må du fjerne strømledningen.

INSTALLASJON
ELEKTRISK—AUTO SPENNINGSTILPASSING
Dette produktet vil automatisk bli tilpasset hvilken som helst strøminnstilling i de områdene som vises på etiketten.

ELEKTRISKE—TYPE 1. KLASSE UTSTYR
DETTE UTSTYRET MÅ JORDES. Strømkontakten må være tilkoplet en korrekt jordet grunnstøpselkontakt. En støpselkontakt som ikke er jordet på rett måte, kan tilføre farlig spenning til lett tilgjengelige metalldeler.

ELEKTRISKE—MEDDELELSE OM LEDNINGER
Bruk en strømledning av maksimal størrelse 4,5 m i lengde, vurdert for minst av 6 amp, 250V, fremstilt av HAR ledning IEC 320 koplingsstykke på den ene kanten og på den andre kanten en plugg som har blitt godkjent i det landet hvor den siste brukeren befinner seg.

BRUKSANVISNINGER FOR MONTERING
FORSIKTIG: Disse modellene er beregnet til bruk i HORISONTAL stilling.
VERTIKAL MONTERING må IKKE UTFØRES uten bruk av et Allied Telesyn vertikal monteringschassis som er spesiallaget til dette formål.

FORSIKTIG: Luftventilene må ikke blokkeres og må ha fri tilgang til luft med romtemperatur for avkjøling.

FORSIKTIG: Gummiføttene må IKKE fjernes fra produktet med mindre en Allied Telesyn vertikal monteringschassis er i bruk.

DRIFTSTEMPERATUR
Dette produktet har blitt fremstilt til bruk med maksimum romtemperatur på 50 grader celsius.

Alle land: Produktet må installeres i samsvar med de lokale og nasjonale elektriske koder.

Padrões: Este produto atende aos seguintes padrões.

Emissão de interferência de radiofrequência EN55022 Classe B

AVISO: Este produto requer cabos protegidos a fim de obedecer aos limites de emissão da Classe B. Se não for utilizado com os cabos protegidos, este produto pode causar interferência na radiorrecepção e, neste caso, pode ser necessário que o utente tome as medidas adequadas.

Imunidade EN50082-1

SEGURANÇA

Segurança Eléctrica EN60950, UL1950, CSA 950

AVISOS SOBRE CARACTERÍSTICAS ELÉTRICAS
ATENÇÃO: PERIGO DE CHOQUE ELÉTRICO
Para evitar CHOQUE ELÉTRICO, não retire a tampa. Não contém peças que possam ser consertadas pelo usuário. Este aparelho contém VOLTAGENS PERIGOSAS e só deve ser aberto por um técnico qualificado e treinado. Para evitar a possibilidade de CHOQUE ELÉTRICO, desconecte o aparelho da fonte de energia elétrica antes de conectar e desconectar os cabos da LAN.

PERIGO DE CHOQUE CAUSADO POR RAIO
PERIGO: NÃO TRABALHE no equipamento ou nos CABOS durante períodos suscetíveis de QUEDAS DE RAIO.

CUIDADO: O CABO DE ALIMENTAÇÃO É UTILIZADO COMO UM DISPOSITIVO DE DESCONEXÃO. PARA DESELETRIFICAR O EQUIPAMENTO desconecte o cabo de alimentação.

INSTALAÇÃO
ELÉTRICO—AJUSTE AUTOMÁTICO DE VOLTAGEM
Este produto ajustar-se-á automaticamente a qualquer voltagem que esteja dentro dos limites indicados no rótulo.

ELÉTRICO—EQUIPAMENTOS DO TIPO CLASSE 1
DEVE SER FEITA LIGAÇÃO DE FIO TERRA PARA ESTE EQUIPAMENTO. O plugue deve ser conectado a uma tomada com ligação de fio terra. Tomadas sem ligação de fio terra podem transmitir voltagens perigosas a peças metálicas expostas.

E**LÉTRICO—AVISO SOBRE O CABO DE ALIMENTAÇÃO**
Use cabo de alimentação com comprimento máximo de 4,5 metros, com uma capacidade mínima de 6 amp e 250 V, fabricado de material para cabo HAR com conector moldado IEC 320 em uma extremidade e, na outra extremidade, um plugue aprovado para uso no país em questão .

INSTRUÇÕES DE INSTALAÇÃO
CUIDADO: Este modelos foram projetados para funcionar na posição HORIZONTAL.
NÃO DEVE SER EFETUADA INSTALAÇÃO VERTICAL sem o uso de um chassis de montagem vertical Allied Telesyn projetado para este fim específico.

CUIDADO: As entradas de ar não devem ser bloqueadas e devem ter acesso livre ao ar ambiente para arrefecimento adequado do aparelho.

CUIDADO: NÃO RETIRE os calços de borracha do produto a menos que esteja sendo usado um chassis de montagem vertical Allied Telesyn.

TEMPERATURA DE FUNCIONAMENTO
Este produto foi projetado para uma temperatura ambiente máxima de 50 graus centígrados.

TODOS OS PAÍSES: Instale o produto de acordo com as normas federais e locais para instalações elétricas.

Estándares: Este producto cumple con los siguientes estándares.

Emisión RFI EN55022 Clase B

ADVERTENCIA: este producto requiere de cables armados para cumplir con los límites de emisión de Clase B. Si no se usa con cables armados, este producto puede causar radiointerferencias, en cuyo caso, puede requerirse del usuario que tome las medidas que sean convenientes al respecto.

Inmunidad EN50082-1

SEGURIDAD

Seguridad eléctrica EN60950, UL1950, CSA 950

AVISOS ELECTRICOS
ADVERTENCIA: PELIGRO DE ELECTROCHOQUE
Para evitar un ELECTROCHOQUE, no quite la tapa. No hay ningún componente en el interior al cual puede prestar servicio el usuario. Esta unidad contiene VOLTAJES PELIGROSOS y sólo deberá abrirla un técnico entrenado y calificado. Para evitar la posibilidad de ELECTROCHOQUE desconecte la corriente eléctrica que llega al producto antes de conectar o desconectar los cables LAN.

PELIGRO DE RAYOS
PELIGRO: NO REALICE NINGUN TIPO DE TRABAJO O CONEXION en los equipos o en LOS CABLES durante TORMENTAS DE RAYOS

ATENCION: EL CABLE DE ALIMENTACION SE USA COMO UN DISPOSITIVO DE DESCONEXION. PARA DESACTIVAR EL EQUIPO, desconecte el cable de alimentación.

INSTALACION
ELECTRICO—AUTO-AJUSTE DE TENSION
Este producto se ajustará automáticamente a cualquier tensión entre los valores máximos y mínimos indicados en la etiqueta.

ELECTRICO—EQUIPO DEL TIPO CLASE 1
ESTE EQUIPO TIENE QUE TENER CONEXION A TIERRA. El cable tiene que conectarse a un enchufe con tierra debidamente instalado. Un enchufe que no está correctamente instalado podría ocasionar tensiones peligrosas en las partes metálicas están expuestas.

ELECTRICO—ADVERTENCIA SOBRE EL CABLE
Use un cable eléctrico con un máximo de 4,5 metros de largo, con una capacidad mínima de 6 amperios, 250 V, hecho de cable HAR, con el conector moldeado IEC 320 en un extremo y con un enchufe que está aprobado por el país de uso final en el otro.

INSTRUCCIONES DE MONTAJE
ATENCION: Estos modelos están diseñados para operar en posición HORIZONTAL. NO SE DEBEN MONTAR VERTICALMENTE sin el uso de un chasis de montaje vertical de Allied Telesyn que se ha diseñado para este fin.

ATENCION: Las aberturas para ventilación no deberán bloquearse y deberán tener acceso libre al aire ambiental de la sala para su enfriamiento.

ATENCION: NO separe las patas de goma del producto a menos que se esté usando un chasis de montaje vertical de Allied Telesyn.

TEMPERATURA REQUERIDA PARA LA OPERACIÓN
Este producto está diseñado para una temperatura ambiental máxima de 50 grados C.

PARA TODOS LOS PAÍSES: Monte el producto de acuerdo con los Códigos Eléctricos locales y nacionales.

Standarder: Denna produkt uppfyller följande standarder.

Radiostörning EN55022 Klass B

VARNING: Skärmkabel bör användas med denna produkt för att uppfylla kraven gällande radiostörningar enligt Klass B. Om ingen skärmkabel används med denna produkt, kan radiostörningar uppstå, vilket kan tvinga användaren till att vidtaga erforderliga åtgärder.

Immunitet EN50082-1

SÄKERHET

Elsäkerhet EN60950, UL1950, CSA 950

TILLKÄNNAGIVANDEN BETRÄFFANDE ELEKTRICITETSRISK:
RISK FÖR ELEKTRISK STÖT För att undvika ELEKTRISK stöt, ta ej av locket. Det finns inga delar inuti som behöver underhållas. Denna apparat är under HÖGSPÄNNING och får endast öppnas av en utbildad kvalificerad tekniker. För att undvika ELEKTRISK STÖT, koppla ifrån produktens strömanslutning innan LAN-kablarna ansluts eller kopplas ur.

FARA FÖR BLIXTNEDSLAG
ARBETA EJ på utrustningen eller kablarna vid ÅSKVÄDER.

VARNING: NÄTKABELN ANVÄNDS SOM STRÖMBRYTARE
FÖR ATT KOPPLA FRÅN STRÖMMEN, dra ur nätkabeln.

INSTALLATION
ELEKTRISKT—AUTOMATISK SPÄNNINGSJUSTERING
Denna produkt justeras automatiskt till alla spänningar inom omfånget som indikeras på produktens märkning.

ELEKTRISKT— TYP KLASS 1 UTRUSTNING
DENNA UTRUSTNING MÅSTE VARA JORDAD. Nätkabeln måste vara ansluten till ett ordentligt jordat uttag. Ett felaktigt uttag kan göra att närliggande metalldelar utsätts för högspänning. Apparaten skall anslutas till jordat uttag, när den ansluts till ett nätverk.

ELEKTRISKT—ANMÄRKNING BETRÄFFANDE KABELN
Använd en kabel med maximum längd 4,5 meter och minimum 6 amp nominal, 250V, av HAR kabelfabrikat med ett specialutformat IEC 320-kontaktdon i ena änden och i den andra en plugg som godkänts i landet där produkten används.

MONTERINGSINSTRUKTIONER
VARNING: Dessa modeller är konstruerade för användning i HORISONTALLÄGE. VERTIKALMONTERING får EJ UTFÖRAS utan att ett Allied Telesyn specialkonstruerat vertikalt monteringschassi används.

VARNING: Luftventilerna får ej blockeras och måste ha fri tillgång till omgivande rumsluft för avsvalning.

VARNING: Ta ej bort gummifötterna från produkten om inte ett Allied Telesyn vertikalt monteringschassi används.

DRIFTSTEMPERATUR
Denna produkt är konstruerad för rumstemperatur ej överstigande 50 grader Celsius.

ALLA LÄNDER: Installera produkten i enlighet med lokala och statliga bestämmelser för elektrisk utrustning.

Table of Contents

Electrical Installation and Safety Requirements i

About This Manual xvii
Document Conventions xviii
Contacting ATI Technical Support xviii
Phone Numbers xviii
Bulletin Board Services xix
Internet Mail xix
CompuServe Forum xix
World Wide Web xix

Chapter 1

Overview 1
Features 2
Mode of Operation 3
Status LEDs 3
Configuration Options 5

Chapter 2

Installation 7
Procedures 7
Cable Length 7
Location 8
Power 8

Chapter 3

Operation 9
Port Connectors 9
SQE Test Switch 10
Status Indicators 10
Front-panel Indicators 11
Back-panel Indicators 12
Cascading 13

Appendix A

Specifications 15
Physical Characteristics 16
Electrical and Mechanical Features 16
Standards 17

Appendix B

Glossary 19

Appendix C

Technical Support Fax Order 25

Appendix D

CentreCOM AT-810SL Manual Feedback 27

Appendix E

Where To Find Us 29

Appendix F

Index 31

About This Manual

This manual is written for system administrators who are responsible for configuring, monitoring, and maintaining a Local Area Network (LAN) of which Allied Telesyn's AT-810SL Multiport Transceiver Fanout, Version 2, is a component.

The contents of each chapter are described below:

- Chapter 1, "Product Description," gives an overview of the features, mode of operation and configuration options of the AT-810SL fanout.
- Chapter 2, "Installation," describes site and power requirements, as well as conventional installation procedures, LED Status Indicators and cascading.
- Chapter 3, "Operation," describes conventional installation procedures, LED Status Indicators and cascading.
- Appendix A, "Technical Specifications," includes information specific to ATI's AT-810SL fanout.
- Appendix B, "Glossary," provides a glossary of terms that are both product and industry specific.
- Appendix C is a "Technical Support Fax Order."
- Appendix D, "AT-810SL Manual Feedback Form," offers a means to transmit your comments and/or suggestions for improving the documentation.
- Appendix E, "Where to Find Us," provides Technical Support and Service information. Note that there are Technical Support contact points listed below as well.
- Appendix F, "Index," is just that.

Document Conventions

The following conventions are used in presenting information in this manual:

Note

A note provides additional information or describes the possible consequence of a specific action you can perform.

Contacting ATI Technical Support

If you are having problems with your AT-810SL fanout, you can contact ATI's Technical Support staff by:

- ❑ Telephone
- ❑ Bulletin board services
- ❑ Electronic mail via the Internet
- ❑ CompuServe forum

When you contact Technical Support, you should have the following information available:

- ❑ Serial number of the AT-810SL fanout
- ❑ Power-up test codes, if any
- ❑ Diagnostic test codes, if any

Phone Numbers

You can contact technical support by calling Monday through Friday from 6:30 AM to 5:00 PM PST:

1-800-428-4835
(United States)

If you need to FAX information to technical support, the number is:

206-481-3790

Appendix C also has a complete FAX form which can be used. For technical support telephone numbers outside of the United States and Canada, contact your reseller or regional ATI office.

Bulletin Board Services

A bulletin board is available. The number is:

206-483-7979

Modem settings for the bulletin board are: 8 bits; no parity; 1 stop bit.

The process is straightforward: Once the BBS is accessed, it requests that you register either as a new user or as a current user. It then provides instructions about the features and functions that are available. This is followed by a list and description of all available technical notes and files that can be downloaded.

Internet Mail

You can send electronic mail via the Internet to:

tech_support@alliedtelesyn.com

CompuServe Forum

ATI has a forum on CompuServe. You can reach us by typing **`go allied`** at the CompuServe prompt (!).

World Wide Web

You can access Allied Telesyn at our new Web Site using the following:

http://www.alliedtelesyn.com

Chapter 1
Overview

Welcome to Allied Telesyn International.

ATI's AT-810SL Multiport Transceiver Fanout, Version 2, is a member of a family of IEEE 10Base5 10 Mbps transceiver fanouts for Ethernet Local Area Networks (LANs).

Through the availability of eight (8) Attachment Unit Interface (AUI) ports, network managers can use this fanout either with small standalone networks or as a concentrator; grouping multiple devices onto a single tap within an Ethernet network.

Figure 1 shows the front panel of an AT-810SL.

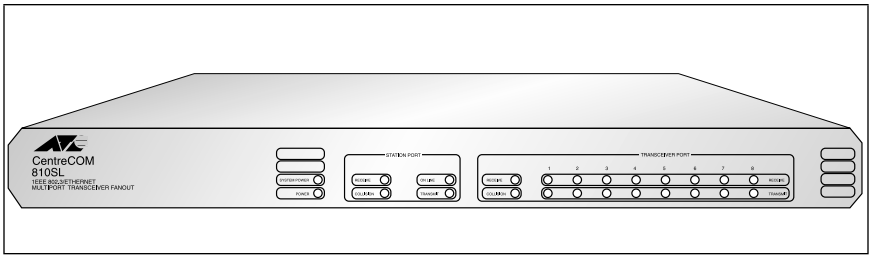

Figure 1: AT-810SL Front Panel

Additionally, if you cascade multiple AT-810SL fanouts (up to 64 stations can be cascaded together), more than a thousand nodes can be attached to a single backbone cable without repeaters or additional internetworking devices.

Once operational, any connected device can be located up to 150 meters (492 ft.) from the backbone cable and up to 200 meters (656 ft.) apart.

Features

The list below summarizes the features of your AT-810SL Multiport Transceiver Fanout:

- ❑ IEEE 802.3 compliant, Ethernet Version 1.0 and 2.0 compatible, 10Base5
- ❑ Operates as either standalone unit or can be connected to an Ethernet backbone and extended to other devices
- ❑ Cascades up to 64 other devices
- ❑ Fault protection is provided by automatic Jabber functionality for each port. Jabber protection inserts an idle state for packets over 7 ms, but less than 20 ms, in length.
- ❑ Signal Quality Error (SQE) — also referred to as Collision or Collision Presence — user-selectable test switch
- ❑ Standalone or rack mountable. A slim-line chassis occupies just one slot in a 19 inch rack. Note that rack mount kit AT-RKMT5 is an available option
- ❑ Both front- and back-panel LEDs for system monitoring
- ❑ One year warranty

Figure 2 shows the back panel of an AT-810SL.

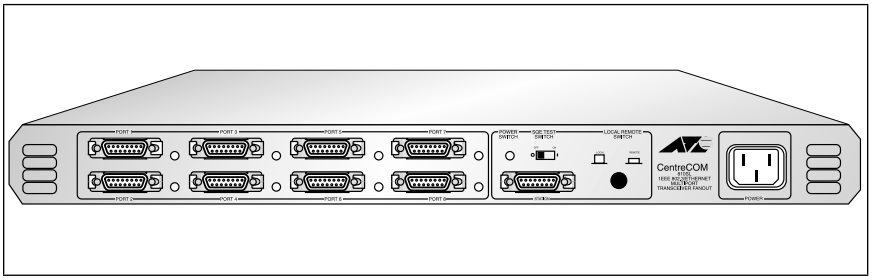

Figure 2: AT-810SL Back Panel

Mode of Operation

An AT-810LS Multiport Transceiver Fanout can connect up to eight (8) Data Terminal Equipment (DTE) workstations in either of one, or two, push button, switch-selectable, modes of operation: Local or Remote.

- In "Local" mode of operation the AT-810SL functions as a standalone workgroup hub. With this switch, you can choose to segment the attached nodes from the main network while, at the same time, allowing local communications between workstations.
- In "Remote" mode of operation, a transceiver can connect to the station AUI port using an AUI cable up to 50 meters (164 ft.) in length.

  Alternatively, you can fit an Allied Telesyn 802.3 fiber optic transceiver into this station AUI port if desired.

  In "Remote" mode, the AT-810SL can also either link multiple users to the backbone or cascade users to another AT-810SL. Further, in "Remote" mode, the transceiver's electrical characteristics pass transparently through the multiport transceiver fanouts to the attached nodes as if each node were attached with its own transceiver.

Status LEDs

The AT-810SL has front panel status and diagnostic indicators that provide "On Line" and "Transmit" status for each port. Packet "Receive" and "Collision" indicators are available for all Transceiver Ports as well as the Station Port.

Note

Please note that a complete discussion of each LED is provided in Chapter 3.

The front panel "System Power" LED illuminates when AC power is applied to the AT-810SL fanout itself.

The “Station Power” LED illuminates when power is applied to any of the eight transceiver ports.

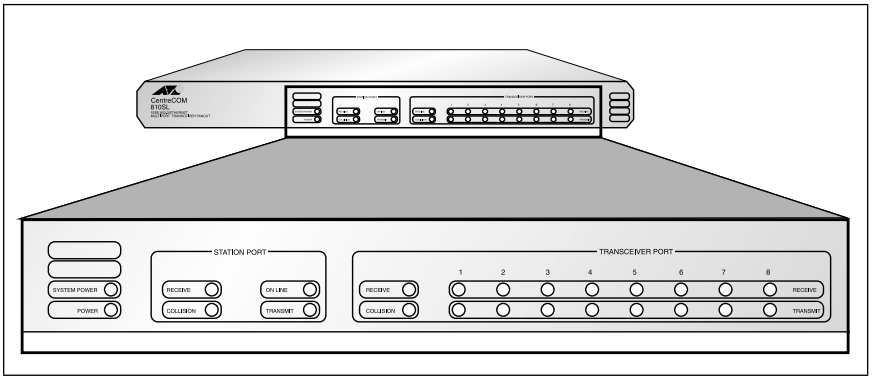

Figure 3: Front Panel LEDs

Redundant LEDs are located on the back panel of the AT-810SL. These LEDs indicate the application of power for each Transceiver Port as well as an AC system power LED to the fanout itself.

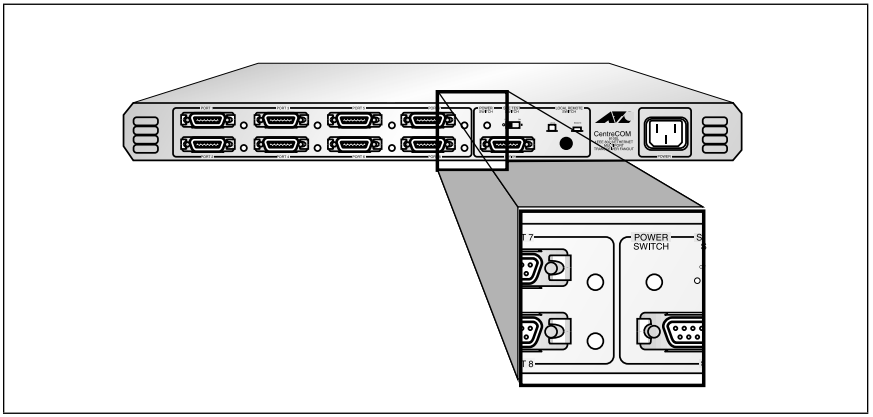

Figure 4: Back Panel LEDs

Configuration Options

As previously stated, the AT-810SL can be used to expand the number of allowable stations per transceiver in the following ways:

- ❑ As an independent network with up to eight DTEs (clients).
- ❑ Additional stations can be attached to an Ethernet coaxial cable segment which may have limited taps (MAUs) available.
- ❑ When numerous stations are in close proximity, the number of transceivers connected to an Ethernet coaxial cable segment can be reduced.
- ❑ The number of stations per Ethernet coaxial cable segment can be increased, thus reducing the number of segments required.

Chapter 2
Installation

Site Requirements

Ensure that the following requirements are met before you install your AT-810SL Multiport Transceiver Fanout:

- ❑ Network cabling is properly configured.
- ❑ Power is connected. The AT-810SL universal power supply will accept either 100-120 or 200-240 VAC at 50 or 60 Hz.
- ❑ Appropriate IEEE 802.3 AUI standard transceiver cables are available.
- ❑ The air intake vents on both sides of the chassis are clear to prevent damage from overheated components.
- ❑ Remote Mode operation may require an ATI CentreCOM 100, 200, 150, 250, 270, or 470 Series external transceivers. Contact your supplier for the appropriate MAU.

Procedures

IEEE 802.3 10Base5 (IEC/ISO 8802-3) conventions and standards place certain limitations on network configurations. Careful planning will help you avoid unnecessary problems before tapping onto the network.

Cable Length

When in "Remote" mode of operation, ensure that your AT-810SL is within 50 meters (164 ft.) of the MAU. In *either* "Local" or "Remote" mode, DTEs must be located within 100 meters (328 ft.).

Table 1 provides an overview of the IEEE 802.3 specifications for network configurations using thick, thin, and twisted-pair wiring.

Table 1: IEEE 802.3 Network Specifications

	10Base-T	10Base2	10Base5
Media	Twisted Pair Cable	Thin Coaxial Cable	Thick Coaxial Cable
Topology	Star, Tree	Bus	Bus
External Devices	Network Adapter Card	Network Adapter Card	Network Adapter Card and External Transceiver
Maximum Segment Length	100 meters (328 ft.)	185 meters (605 ft.)	457 meters (1,500 ft.)
Maximum Devices per Segment	12	30	100
Maximum Devices per Network	1,024	1,024	1,024

Location

Once you have installed the cables and placed the AT-810SL where you want it, you can begin the actual connections.

The unit may be installed in any location where the LEDs will be visible for monitoring and where there is adequate ventilation, temperature control and power connections.

Desktop or rackmount installation is possible with ATI's optional Rack Mount Kit AT-RKMT5.

Power

AT-810SL requires a 100-120/200-240 VAC power source with a line frequency of 50/60 Hz. The unit is equipped with an IEC-320/CEE-22 standard power input connector on the back panel. One end of the power cord should have a receptacle to fit this type of connector. The other end should be fitted with the standard power cord plug for the country in which the unit will be operated.

A power cord is *not* provided for European AC outlets. Obtain the appropriate cord from your equipment vendor.

Chapter 3
Operation

Your AT-810SL fanout requires minimal operator attention. For example, when the Station Port is set to “Remote” mode of operation, access can be through an AUI cable and transceiver to an Ethernet coaxial cable or fiber optic cable.

Once installed and set for your configuration, the AT-810SL will be transparent to both users and the network in general.

Port Connectors

Transceiver Port connectors as well as the Station Port connector are located on the back panel. This is shown in Figure 5.

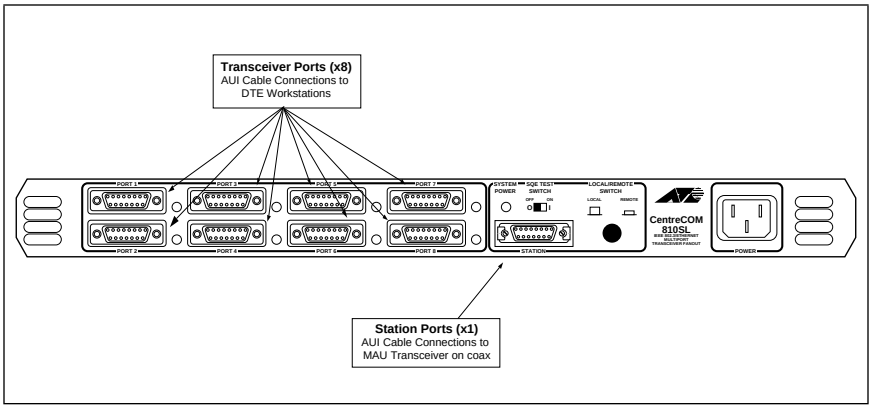

Figure 5: Port/Station Connector(s)

Note

All AT-810SL screws and mounting hardware use International Standard metric threads. Do not attempt to replace them with a different type of threaded screw.

Figure 6 details the rear panel.

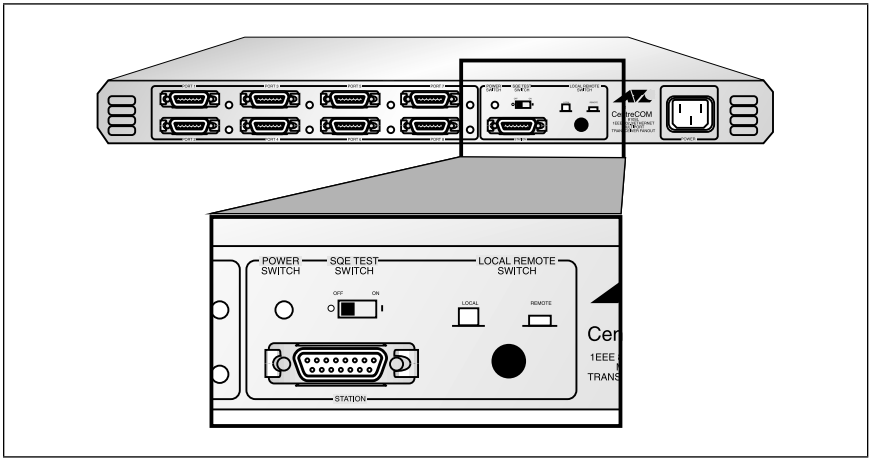

Figure 6: Rear Panel Switches

SQE Test Switch

Located on the back panel as shown in Figure 6, the SQE TEST SWITCH is an ON or OFF user-selectable slide switch which is independent of the attached MAU. This switch will also function in both local and remote mode of operation.

You have the option to place the SQE Test slide switch either ON or OFF, depending on your application. If ON, it means that the SQE Test is provided to any DTE (or workstation) that is connected to one of the local eight transceiver ports.

Status Indicators

The AT-810SL has LEDs to aid in installing, operating and troubleshooting the fanout. These LEDs also serve to verify correct transceiver operation at a glance. The following information is a description of their location, grouping and functionality.

Front-panel Indicators

Figure 7 shows the location of the front panel LEDs.

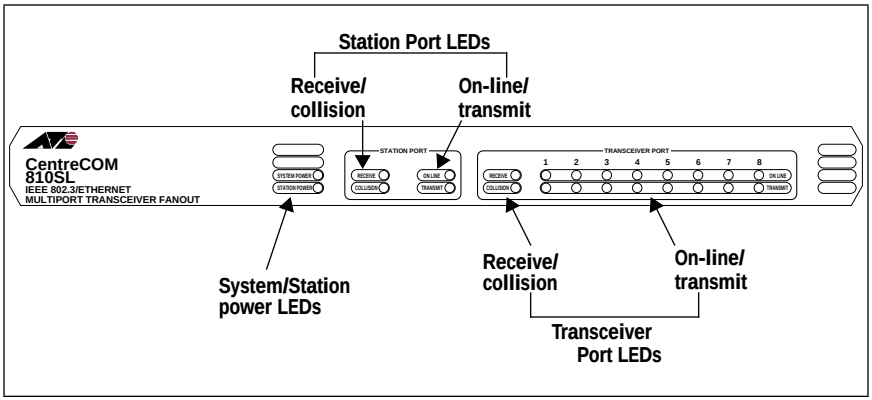

Figure 7: Front Panel Power LEDs

Power LEDs. Two types of power indicators are located on the far left of the front panel:

- **System Power**—When lighted, this LED indicates that the correct AC voltage has been applied and the internal power supply is operational.
- **Station Power**—When lighted, this LED indicates that power (+12 volts) is applied to Pin-13 of the Station Ports DB15 connector by the MAU backbone transceiver through the AUI cable.

Station Port LEDs. To the right of the Power LEDs are four Station Port indicators. When illuminated, Station Port LEDs indicate system status activity as follows:

- **On Line** — Mode Selection is “Remote” (for configuration status only).
- **Transmit** — data is being received by one of the eight Transceiver Ports and transmitted to the Station Port
- **Receive** — data is being received into the Station Port and transmitted to one of the eight Transceiver Ports
- **Collision** — a collision or SQE has occurred on the segment to which the Station Port is connected.

Note

Station Port LEDs are only active when the AT-810SL is configured for "Remote" operation.

Transceiver Port LEDs. To the right of the Station Port LED cluster are Transceiver Port LEDs. When illuminated, Transceiver Port LEDs indicate system status as follows:

- **On-line —** The corresponding Transceiver Port (1-8) is connected through an AUI cable to a DTE. This means that the DTE is powered and on-line.
- **Transmit** — The corresponding Transceiver Port is receiving a packet and transmitting it to the other seven Transceiver Ports. In "Remote" Mode, packets will also be sent through the Station Port.
- **Receive** — Each of the Transceiver Ports is presenting a packet to its associated DTE. Only one LED is required to represent this function, as all of the Transceiver Ports are effectively parallel for this function.
- **Collision** — A Collision or SQE has occurred on, or between, one or more of the Transceiver Ports. This is not a latched condition. If this LED is continuously lighted, one of three conditions apply:
  - — A hard failure
  - — A configuration problem with one of the DTEs
  - — Multiple collisions are occurring. This condition indicates overload and warrants further attention.

Back-panel Indicators

Figure 8 shows the location of the back-panel LEDs.

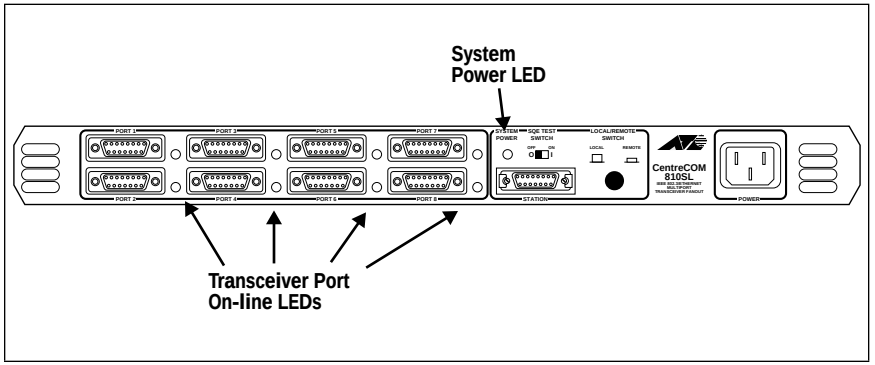

Figure 8: Back Panel LEDs

The AT-810SL back panel has two categories of LEDs:

- **On Line** — Each Transceiver Port has an associated On-line LED. When illuminated, these LEDs indicate that power is applied to the DTE which is connected to the related port through the AUI cable. These LEDs will be illuminated (or not illuminated) regardless of the AT-810SL's operational status. They allow a DTE's "in use" status to be noted before disconnection of its cable.
- **System Power** — When illuminated, this LED indicates AC power is correctly applied and the internal power supply is operational. This LED is redundant to the System Power LED which is located on the front panel.

Cascading

As previously stated, your AT-810SL can be used to cascade other devices. Using up to eight multiport transceivers in this configuration allows a maximum of 64 DTE (workstations) to be interconnected.

A cascaded series of multiport transceivers can be operated as an independent network or connected to other segments through an optional ATI CentreCOM transceiver.

The following figure illustrates eight CentreCOM Multiport Transceiver Fanouts cascading to provide up to 64 DTE (workstation) connections from one MAU tap on a coaxial backbone.

Figure 9 shows the AT-810SL functioning with a backbone transceiver fanout.

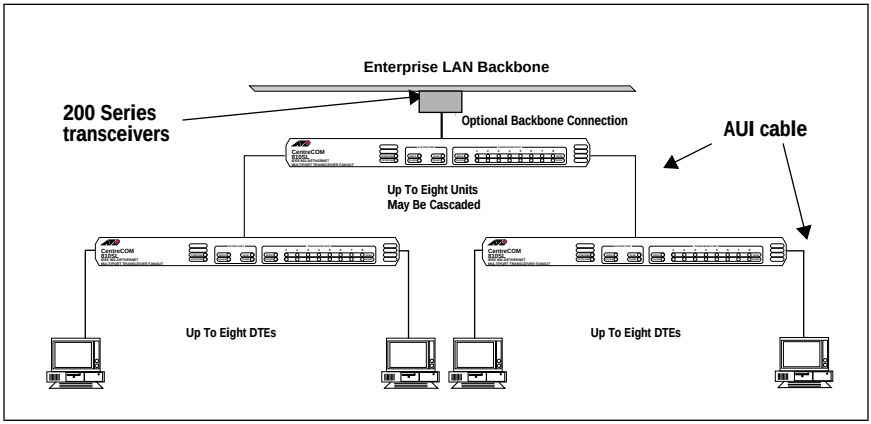

Figure 9: Backbone Transceiver Fanout

Appendix A
Specifications

Table 2 summarizes the specifications for the AT-810SL Multiport Transceiver Fanout.

Table 2: AT-810SL Specifications

Transceiver Cable Side **Input impedance:** 78 Ω ± 1% **Output impedance:** 78 Ω ± 5Ω **Input/output voltage:** ± 720 mV (typical)	**Power Characteristics** **Isolation:** 2000 VAC breakdown voltage **Parameter:** Input Voltage (Auto Ranging) 100 to 120 VAC, 50/60 Hz, 0.25A 200 to 240 VAC, 50/60 Hz, 0.25A
Transmit **Static delay:** 150 ns (typical), 250 ns (worst) **Bit loss:** 2 bits	**Physical Characteristics** **Dimensions:** 43.2 cm x 25.2 cm x 4.6 cm **Weight:** 2.1 kg **Operating temperature:** 0 to 50º C **Storage temperature:** -20 to 60º C **Relative humidity:** 5 to 80% condensing
Receive/Collision **Static Delay:** 170 ns (typical), 250 ns (worst) **Bit loss:** 2 bits **Collision detection time:** 500 ns (worst) **SQE Test:** 600-1000 ns delay, 900-1600 ns length	**Electrical/Mechanical Approvals** **EMI:** FCC Class A, Vfg-B **Safety:** UL. CSA, TUV-GS, CE compliant

Physical Characteristics

Dimensions:	43.2 cm wide x 25.2 cm deep x 4.6 cm high (17.0 in. wide x 9.9 in. deep x 1.7 in. high)

Note

Rack mount kit AT-RKMT5 is an available option.

Weight:	2.1 kg (4 lbs. 7 oz.)
Power Consumption	55 Watts maximum
Operating temperatures:	0° to 50° C
Storage temperatures:	-20° to 60° C
Relative humidity:	5% to 80% (non-condensing)
Operating altitude:	Up to 10,000 ft.
Desktop mounting:	4 ea. adhesive plastic feet attached to the bottom of the hub

Electrical and Mechanical Features

Network Ports:	8 10Base5 15-Pin male AUI fanout Transceiver Ports with locking posts 1 10Base5 15 Pin female AUI host Station Port with IEEE slide latch
Cooling:	One (1) internal fan with left and right side air-intake vents
Data rate:	10 Mbps
Compatibility	IEEE 802.3 compliant and Ethernet Version 1.0 and 2.0 compatible, 10Base5
Input voltage	100-120/200-240 VAC, 50/60 Hz

Standards

Safety:	UL1950, CSA22.2 NO. 950, TUV and EN60950.
Emission:	FCC Class A, EN55022 Class B
Immunity:	EN50082-1

Appendix B
Glossary

10Base2—Also called thin Ethernet, thinnet or CheaperNet, a 10 MHz baseband specification. Cable impedance is 50 Ω and maximum coaxial segment length is 185 meters (607 ft.).

10Base5—Also called thick Ethernet, a 10 MHz baseband specification. Cable impedance is 50 Ω and maximum coaxial segment is 500 meters (1,640 ft.). The cable is commonly referred to as yellow cable. Thick Ethernet cable is typically used as a trunk or backbone path of the network.

10Base-T—IEEE 802.3 UTP Ethernet. Low-cost Level 3 or better UTP wiring affords 100 meters (328 ft.) of point-to-point link segments. UTP uses RJ-45 connectors and sometimes 50-pin Telco connectors to a patch panel and runs at 10 MHz.

100Base-TX—Originally a Grand Junction Networks proposal for 100 Mbps Ethernet using 2 pairs of Category 5 wire and CSMA/CD, it has been standardized by the IEEE as 802.3u.

50-PIN TELCO (RJ21)—This connector is very common in 10Base-T wiring. As opposed to the RJ-45 connector, the 50-pin Telco connector concentrates up to 12 UTP connections onto one connection. This concentration of UTP ports is then broken out for connection to a punch-down block inside a building's wiring closet. 50-pin Telco connections provide a very clean, uncluttered interface to the building's wiring.

AT-ADAPT-2— A harmonica-style adapter that allows direct conversion from a 50-pin Telco connector to RJ-45 receptacles.

ATTACHMENT UNIT INTERFACE (AUI)—Connection between a MAU (transceiver) and a DTE (typically a workstation). Includes a 15-pin D-sub connector and sometimes a 15-conductor twisted pair cable. Maximum length is 50 meters (164 ft.).

BACKUP MODULE—A repeater that behaves as the management module when the Master fails in a department concentrator.

BASEBAND COAXIAL SYSTEM—A system whereby information is directly encoded and impressed on the coaxial transmission medium. At any point on the medium, only one information signal at a time can be present without disruption.

BAYONET NUT COUPLE (BNC) CONNECTOR—A 10Base2 thin coax connector with push-on BNC locking lug that quickly locks into place with a half twist.

BIT RATE (BR)—The rate of data throughput on the medium in bits per second. Ethernet specifies 10 million bits per second.

BIT TIME—The duration of one bit symbol (1/BR). Ethernet specifies a bit time of 100 ns.

CARRIER SENSE—In a LAN, an ongoing activity of a data station to detect whether another station is transmitting.

CARRIER SENSE MULTIPLE ACCESS with COLLISION DETECT (CSMA/CD)—This is the access method employed by IEEE 802.3 LAN transceivers, by which multiple stations compete for use of the transmission medium (coax cable) for data packet transmission. It provides for a level of error detection should that transmission be corrupted or impeded by contention for the transmission medium.

COAX SEGMENT—A segment of Ethernet cable that contains MAUs.

COAXIAL CABLE—A two-conductor (center conductor, shield system), concentric, constant impedance transmission line used as the trunk medium in the baseband system.

COAXIAL CABLE SEGMENT—A length of coaxial cable sections and coaxial connectors, terminated at each end in its characteristic impedance.

COLLISION—An unwanted condition that results from concurrent transmissions on the physical medium.

COMPATIBILITY INTERFACE—The MDI coaxial cable interface and the AUI branch cable interface, the two points at which hardware compatibility is defined to allow connection of independently designed and manufactured components to the baseband transmission system.

CROSSOVER—Wiring used when connecting a 10Base-T MAU to another 10Base-T MAU or a 10Base-T hub to another 10Base-T hub. For example, one 10Base-T MAU has the TD pair on the same pins as another 10Base-T MAU. If pins were wired straight, there would be two transmitters on one pair and no receiver. As a solution, the crossover cable crosses the TD pair with the RD pair, to connect the TD pins on one end to the RD pins at the other end.

D-SUB CONNECTOR—The AUI cable uses 15-pin D-sub connectors. “D” refers to the shape of the connector shell. Also called miniature D, DB15, or DIX connectors.

DATA COMMUNICATION EQUIPMENT (DCE)—In RS-232 specification, a module, such as a modem, for connecting a DTE to other equipment. A repeater connected to a terminal or workstation for Omega management use is wired as a DCE.

DATA TERMINAL EQUIPMENT (DTE)—In RS-232 specification, a module typically at the end of a segment (i.e., uninterrupted length of Ethernet cable). The DTE could be an Ethernet workstation, repeater or bridge.

DEPARTMENT CONCENTRATOR—Hub that provides a large number of workstation connections. The term department concentrator refers to multiple repeaters housed in an AT-36C8 chassis. See Hub/Repeater, Repeater.

DIX CONNECTOR—See D-Sub Connector

HARMONICA ADAPTER—This adapter provides a simple way to convert the 50-pin Telco connection to RJ-45 connections. See AT-Adapt-2.

HEARTBEAT—See SQE

HOUSE WIRING—House wiring is the existing wiring inside a building. This wiring generally originates from one or more wiring closets, such as a telephone room. Some older buildings may have wiring unsuitable for 10 megabit data rates. In these circumstances, it is recommended that the wiring be tested with a 10Base-T signal/wire tester.

HUB/REPEATER—A hub is a central signal distributor. It is used in a wiring topology consisting of several point-to-point segments originating from a central point. The term hub is often used interchangeably with the term repeater. Multiport 10Base-T, 10Base2 and fiber optic (10Base-FL, FOIRL) repeaters are considered hubs. See Repeater.

HUB-to-HUB WIRING—See MAU-to-MAU Wiring

HUB-to-MAU WIRING—UTP cables for 10Base-T hub-to-MAU or NIC cards are wired straight-through. An RJ-45 receptacle at the hub would wire pin-to-pin to the RJ-45 receptacle at the MAU.

IMPEDANCE—An electrical characteristic of a circuit dealing with the combination of the AC and DC resistance and the appearance of that resistance to attached circuits.

JABBER LOCK-UP—The MAU's ability to automatically inhibit the transmit data from reaching the medium if the transmit data time exceeds a specified duration. This duration is in the range of 20 ms to 150 ms. Jabber lock-up protects the medium from being overrun with data packets from a possibly defective device.

JAM—This is a term used to describe the collision reinforcement signal output by the repeater to all ports. The jam signal consists of 96 bits of alternating 1s and 0s. The purpose is to extend a collision sufficiently so that all devices cease transmitting.

JITTER—The shift of the data bit in respect to a standard clock cycle. Jitter is undesirable and must be minimized.

LINK SEGMENT—The link segment of coaxial cable is a segment that has no MAU devices, but links together two LAN devices such as repeaters.

LINK TEST—In 10Base-T Ethernet there is a link test function that validates the UTP link. This consists of a pulse transmitted from point A on one pair that is validated at point B. Point B also transmits a pulse on the second pair to be validated by point A. These pulses occur during media idle states (in between packets).

MAU—See Medium Attachment Unit

MAU-to-MAU, HUB-to-HUB WIRING—10Base-T MAU-to-MAU or hub-to-hub wiring generally requires a cross-over cable located somewhere along the UTP cable run. This may commonly occur at the punch-down block or between the RJ-45 wall receptacle and the workstation.

MAU/TRANSCEIVER—An Ethernet transceiver is a MAU. A 10Base-T MAU interfaces the UTP media to an AUI port on a workstation, repeater, bridge or other Ethernet device.

MDI/MDI-X—See Medium Dependent Interface

MEDIUM ATTACHMENT UNIT (MAU)—In a LAN, a device used in a data station to couple the DTE to the transmission medium.

MEDIUM DEPENDENT INTERFACE (MDI)—The mechanical and electrical interface between a hub and a transceiver (MAU). MDI-X is another version of the interface that enables hubs to connect using different pin-outs, thereby avoiding conflicts that occur when receiving and transmitting packets use the same pin-out.

N-SERIES—A barrel shaped, threaded connector used on 10Base5 (thick Ethernet) coaxial cable.

PATCH PANEL—A 10Base-T patch panel may be used between a punch-down block and UTP workstation. The patch panel generally has a female RJ-45 connector on the front for each workstation and a Telco (RJ21) connector on the back, which is wired to a punch-down block. This provides a convenient way for the installer or network manager to connect the hub 10Base-T ports into the desired building locations.

POLARITY CORRECTION—Many 10Base-T UTP ports have a polarity correction function. If the UTP wiring has RD- and RD+ inadvertently crossed, the polarity correction function will sample the signal and electrically swap the wires. If the TD- and TD+ wires are crossed, the correction would occur at the MAU on the other end of the UTP link. This occurs within a single pair and should not be confused with the crossover cable.

PUNCH-DOWN BLOCK—The punch-down block is the wiring panel where the house wiring from the building's offices terminates. This is where many 10Base-T hubs would be located. Wiring installers use a special punch-down tool to insert the UTP wire for data and voice applications.

REPEATER—A device used to extend the length, topology, or interconnectivity of the physical medium beyond that imposed by a single segment, up to the maximum allowable end-to-end trunk transmission line length. Repeaters perform the basic actions of restoring signal amplitude, waveform and timing applied to normal data and collision signals.

RJ-45—This connector is a 10Base-T and 100Base-T standard and is used to connect STP/UTP cabling. It is inexpensive and easy to install onto UTP cable.

Shielded Twisted Pair (STP)—Two, or more, insulated wires that are twisted together and then wrapped in a cable with metallic braid or foil to prevent interference and offer noise-free transmissions. Also refers to IBM Type 1 cable. c

SIGNAL QUALITY ERROR (SQE)—Also referred to as Collision or Collision Presence. This occurs when two devices attempt to transmit at the same time, which is an illegal condition. All ATI transceivers test for SQE.

SQE TEST—Commonly referred to as Heartbeat, is a special 802.3 signal sent by the MAU to the DTE to test the collision detection function. Some DTE want SQE and others do not. Repeaters do not want the SQE Test.

STANDALONE—Repeater operating as a hub on its own; i.e., not a module among other modules in a department concentrator chassis.

STRAIGHT-THROUGH—A type of wiring connection where the pins of one connector connect to the same pins of another connector. For example, pin 1 of one connector connects to pin 1 of another connector.

TELCO CONNECTOR— A 50-pin receptacle that plugs into the front of the hub, enabling cables from external devices to connect to the hub.

THICK ETHERNET—See 10Base5

THIN ETHERNET—See 10Base2

TRUNK CABLE—The coaxial cable used to distribute signals over long distances throughout a cable system.

UNSHIELDED TWISTED PAIR (UTP)—A cable used in 10Base-T and 100Base-T wiring that consists of at least two twisted pairs of 22 to 26 AWG wire. The pairs should have at least 3 twists per foot and have an impedance of 100 Ω. Level 3, Level 4 and Level 5 UTP cables fit these criteria.

Appendix C

Technical Support Fax Order

Name _____

Company _____

Address _____

City _____ **State/Province** _____

Zip/Postal Code _____ **Country** _____

Phone _____ **Fax** _____

Incident Summary

Model number of Allied Telesyn product I am using _____

Network software products I am using _____

_____

Brief summary of problem _____

_____

Conditions (List the steps that led up to the problem.) _____

_____

_____

_____

Detailed description (Use separate sheet, if necessary)

_____

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When completed, fax this sheet to the appropriate ATI office. Fax numbers can be found in page 29.

Appendix D

CentreCOM AT-810SL Manual Feedback

Please tell us what additional information you would like to see discussed in the manual. If there are topics you would like information on that were not covered in the manual, please photocopy this page, answer the questions and fax or mail this form back to Allied Telesyn International. The mailing address and fax number are at the bottom of the page. Your comments are valuable when we plan future revisions of the manual.

I found the following the most valuable _____

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I would like the following more developed _____

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I would find the manual more useful if _____

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Please fax or mail your feedback. Fax to 1-206-481-3790. Or mail to:
Allied Telesyn International Technical Communications Department
19015 North Creek Parkway, #200
Bothell, WA 98011 USA

Appendix E
Where To Find Us

For Technical Support or Service		
Location	Phone	Fax
Asia Singapore, Taiwan, Thailand, Malaysia, Indonesia, Korea, Philippines, China, India	(+65) 3815-613	(+65) 3833-830
Australia Australia, New Zealand	(612) 416-0619	(612) 416-9764
France France, Belgium, Luxembourg, The Netherlands, Middle East, Africa	(+33) 1-60-92-15-32	(+33) 1-69-28-37-49
Germany Germany, Switzerland, Austria, Eastern Europe	(+49) 30-435-900-126	(+49) 30-435-70-650
Hong Kong	(+852) 2-529-4111	(+852) 2 529-7661
Italy Italy, Spain, Portugal, Greece, Turkey, Israel	(+39) 2-416047	(+39) 2-419282
Japan	(+81) 3-3443-5640	(+81) 3-3443-2443
North America United States, Canada, Mexico, Central America, South America	1 (800) 428-4835	1 (206) 481-3790
United Kingdom United Kingdom, Denmark, Norway, Sweden, Finland, Iceland	(+44) 1-235-442560	(+44) 1-235-442490
Technical Bulletin Board Service	1 (206) 483-7979	
CompuServe	Go ALLIED	
World Wide Web	http://www.alliedtelesyn.com	

For Information Regarding Allied Telesyn International Corp.	
Allied Telesyn International Corp. 19015 North Creek Parkway Suite 200 Bothell, WA 98011 Tel: 1 (206) 487-8880 Fax: 1 (206) 489-9191	**Allied Telesyn International Corp.** 950 Kifer Road Sunnyvale, CA 94086 Tel: 1 (800) 424-4284 (USA and Canada) Fax: 1 (408) 736-0100

For Sales Information

Australia

Lindfield, NSW
Tel: (612) 416-0619, Fax: (612) 416-9764

Canada

Rexdale, Ontario
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Richmond, British Columbia
Tel: (604) 244-0678, Fax: (604) 270-3644

England

Abingdon, Oxon
Tel: (+44) 1235-442500, Fax: (+44) 1235-442590

France

Les Ulis
Tel: (+33) 1-60921525, Fax: (+33) 169-28-37-49

Germany

Berlin
Tel: (+49) 30-435-90-00, Fax: (+49) 30-435-706-50

Freising
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Hong Kong

Wanchai
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Italy

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Machida-shi, Tokyo
Tel: (+81) 427-21-8141, Fax: (+81) 427-21-8848

Yodogawa-ku, Osaka
Tel: (+81) 6-391-6310, Fax: (+81) 6-391-6325

Singapore

Tel: (+65) 383-3832, Fax: (+65) 383-3830

United States

Scottsdale, AZ
Tel: (602) 423-7087 Fax: (602) 423-7088

Los Angeles, CA
Tel: (310) 412-8684, Fax: (310) 546-3323

Mission Viejo, CA
Tel: (714) 699-0628, Fax: (714) 699-0276

San Diego, CA
Tel: (619) 279-3899, Fax: (619) 279-3897

Santa Ana, CA
Tel: (714) 838-0434, Fax: (714) 838-9721

Clearwater, FL
Tel: (813) 726-0022, Fax: (813) 726-0234

Norcross, GA
Tel: (770) 448-7214, Fax: (770) 448-2600

Reading, MA
Tel & Fax: (617) 944-3492

Eden Prairie, MN
Tel: (612) 829-7506, Fax: (612) 903-5284

St. Louis, MO
Tel: (314) 894-6160, Fax: (314) 894-3773

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Tel: (603) 743-3010, Fax: (603) 743-6327

Plaistow, NH
Tel: (603) 382-0815, Fax: (603) 382-0818

Portsmouth, NH
Tel: (603) 431-6461, Fax: (603) 431-1649

Morrisville, NC
Tel: (919) 468-0831, Fax: (919) 468-0829

Lake Oswego, OR
Tel: (503) 699-3130, Fax: (503) 636-6575

Austin, TX
Tel: (512) 261-6378, Fax: (512) 261-6379

Dallas, TX
Tel: (214) 365-9471, Fax: (214) 365-9472

San Antonio, TX
Tel: (210) 646-8744

Vienna, VA
Tel: (703) 506-0196, Fax: (703) 506-1986

Appendix F
Index

C

cabling
  10Base2 8
  10Base5 8
contacting ATI xviii
  bulletin board services xix
  CompuServe xix
  internet mail xix
  manual feedback 27
  phone numbers xviii
  technical support fax order 25
  world wide web xix

D

document conventions xviii

E

electrical and mechanical features 16

I

incident summary 25
installation 7, 9

P

physical characteristics 16

S

site requirements 7, 9
specifications 15

W

wiring 8